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Yvette Killingham

Attorney Docket No. 29191-707

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

~~ADEMAR~~

The Application

Inventor(s): Heller, Jonathan et al.

Application No.: 10/645,863

Filed: August 20, 2003

Title: SYSTEM OF ANALYZING COMPLEX MIXTURES OF BIOLOGICAL AND OTHER FLUIDS TO IDENTIFY BIOLOGICAL STATE INFORMATION

Art Unit: Not yet assigned

Examiner: Note yet assigned

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97

Sir/Madam:

Listed below or on an attached Form PTO-1449 is information known to applicant(s). A copy of each listed publication and U.S. and foreign patent, except for pending U.S. applications, is being submitted herewith, along with a concise explanation of information in a foreign language, if any, pursuant to 37 C.F.R. §1.97-1.98.

Applicants respectfully request that the listed information be considered by the Examiner and be made of record in the above-identified application. If form PTO-1449 is enclosed, the Examiner is requested to initial and return it in accordance with MPEP §609.

This statement is not intended to represent that a search has been made or that the information cited in the statement is, or is considered to be, material to patentability as defined in §1.56.

☒ This statement qualifies under 37 C.F.R. §1.97, subsection (b) because (check all that apply):

- ☒ (1) It is being filed within 3 months of the application filing date and is other than a continued prosecution application under § 1.53(d)
-- OR --
☐ (2) It is being filed within 3 months of entry of a national stage
-- OR --
☐ (3) It is being filed before the mail date of the first Office Action on the merits
-- OR --
☐ (4) It is being filed before the mailing of a first Office Action after the filing of a request for continued examination under § 1.114.

☐ 37 C.F.R. §1.97(c). If this statement is being filed after the latest of: (1) three months beyond the filing date of a national application; (2) three months beyond the date of entry of the national stage as set forth in §1.491 in an international application; or (3) the mailing date of a first Office action on the merits, but before the mailing date of the earlier of a final office action under §1.113 or a notice of allowance under §1.311, then:

- ☐ a certification as specified in §1.97(e) is provided below; **or**
☐ a fee of \$180.00 as set forth in §1.17(p) is authorized below, enclosed, or included with the payment of other papers filed together with this statement.


☐ 37 C.F.R. §1.97(d). If this statement is being filed after the mailing date of the earlier of a final office action under §1.113 or a notice of allowance under §1.311, but before payment of the issue fee, then:

- A. a certification as specified in §1.97(e) is completed below; and
B. a petition under 37 C.F.R. §1.97(d) requesting consideration of this statement is submitted herewith; **and**
C. a fee of \$130.00 as set forth in §1.17(i)(1) is authorized below, enclosed, or included with the payment of other papers filed together with this statement.

☒ *Fee Authorization.* The Commissioner is hereby authorized to charge the above-referenced fees of \$0.00 and charge any additional fees or credit any overpayment associated with this communication to Deposit Account No. 23-2415 (Docket No.29191-707).

Respectfully submitted,

WILSON SONSINI GOODRICH &
ROSATI

By: 
Vern Norviel, Reg. No.32,483

Dated: 11/21/03

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PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. Department of Commerce

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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known		
				Application No.	10/645,863	
				Filing Date	8/20/03	
				First Named Inventor	Heller	
				Art Unit	Not yet assigned	
				Examiner Name	Not yet assigned	
Sheet	1	Of	4	Attorney Docket No.		29191-707

U.S. PATENT DOCUMENTS					
Examiner's Initials	Cite No. ¹	Document No.	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US-6,068,749	5/30/00	Karger et al.	
		US-5,872,010	2/16/99	Karger et al.	
		US-5,917,184	6/29/99	Carson et al.	
		US-5,958,202	9/28/99	Regnier et al.	
		US-6,375,817	4/23/02	Taylor et al.	
		US-6,175,112	1/16/01	Karger et al.	
		US-6,342,142	1/29/02	Ramsey et al.	
		US-6,231,737	5/15/01	Ramsey et al.	
		US-6,033,546	3/7/00	Ramsey	
		US-6,358,692	3/19/02	Jindal et al.	
		US-5,856,671	1/5/99	Henion et al.	
		US-6,207,954	3/27/01	Andrien, Jr. et al.	
		US-6,139,734	10/31/00	Settlage, et al.	
		US-5,245,186	9/14/93	Chait et al.	
		US-5,045,694	9/3/91	Beavis et al.	
		US-4,977,320	12/11/90	Chowdhury et al.	
		US-6,318,970	11/20/01	Backhouse	
		US-6,368,562	4/9/02	Yao	
		US-5,993,633	11/30/99	Smith et al.	
		US-6,187,190	2/13/01	Smith et al.	
		US-6,107,628	8/22/00	Smith et al.	
		US-5,545,304	8/13/96	Smith et al.	
		US-5,833,861	11/10/98	Afeyan et al.	
		US-5,952,653	9/14/99	Covey et al.	
EXAMINER SIGNATURE			DATE CONSIDERED		

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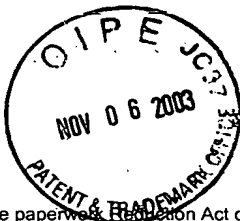
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		US-5,393,975	2/28/95	Hail et al.	
		US-6,322,682	11/27/01	Arvidsson et al.	
		US-6,379,791	4/30/02	Schneider et al.	
		US-6,017,693	1/25/00	Yates III, et al.	
		US-4,483,885	11/20/84	Chait et al.	
		US-4,443,319	4/17/84	Chait et al.	
		US-5,599,432	2/4/97	Manz et al.	
		US-5,296,114	3/22/94	Manz	
		US-6,086,243	7/11/00	Paul et al.	
		US-6,091,502	7/18/00	Weigl et al.	
		US-6,159,739	12/12/00	Weigl et al.	
		US-6,277,641	8/21/01	Yager	
		US-5,624,539	4/29/97	Ewing et al.	
		US-5,358,618	10/25/94	Ewing et al.	
		US-6,284,113	9/4/01	Bjornson et al.	
		US-6,280,589	8/28/01	Manz et al.	
		US-6,240,790	6/5/01	Swedberg et al.	
		US-6,284,115	9/4/01	Apffel	
		US-2002/0039747	4/4/02	Lubman et al.	
		US-2002/0054289	5/9/02	Thibault et al.	
		US-2002/0036140	3/28/02	Manz et al.	
		US-2002/0041827	4/11/02	Yager et al.	
		US-2001/0014461	8/16/01	Hutchens et al.	
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		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
		WO 00/65472	11/2/00	Ringold et al.		
		WO 02/06829	1/24/02	Hitt et al.		
EXAMINER SIGNATURE			DATE CONSIDERED			

OTHER PRIOR ART - NON PATENT RELATED DOCUMENTS			
Examiner Initials*	Cite No.1	Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the Item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s) publisher city and/or country where published	T ²
		BERTERO, M., "Linear inverse and ill-posed problems". <i>In Advances in Electronics and Electronic Physics. Academic Press</i> , (1989), NY.	
		DONOHO, D. L. "Nonlinear solution of linear inverse problems by wavelet- vaguelette decomposition". <i>App. and Comp. Harmonic Analysis</i> , (1995), 2:101- 126.	
		DONOHO, D. L. "Unconditional bases are optimal bases for data compression and for statistical estimation". <i>Applied and Computational Harmonic Analysis</i> , (1993), 1(1):100-115.	
		DONOHO, D. L., et al. "Adapting to unknown smoothness via wavelet shrinkage". <i>Journal of the American Statistical Association</i> , (1995), 90(432):1200-1224.	
		GUYON, I, et al. "An introduction to variable and feature selection". <i>JMLR</i> , (2003), 1:1-48.	
		KALIFA, Jerome, et al. "Minimax Deconvolution in Mirror Wavelet Bases". <i>IEEE Trans. on Image Processing</i> . (1999), 1-30.	
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		KALIFA, Jerome, et al. "Thresholding Estimators for Linear Inverse Problems and Deconvolutions". <i>Annals of Statistics</i> (2003), no. 1, 58-109.	
		PETRICOIN III, E. F., et al., "Serum proteomic patterns for detection of prostate cancer". <i>JNCI</i> , (2002), 94(20):1576-1578.	
		PETRICOIN III, E. F., et al., "Use of proteomic patterns in serum to identify ovarian cancer". <i>The Lancet</i> , (2002), 359:572-577.	
		STRAND, O. N. "Theory and methods related to the singular function expansion and landweber's iteration for integral equations of the first kind". <i>SIAM J. Num. Anal.</i> , (1973), 5.	
		STRITTMATTER, E. F., et al., "High mass measurement accuracy determination for proteomics using multivariate regression fitting: application to electrospray ionization time-of-flight mass spectrometry". <i>Anal. Chem.</i> , (2003), 75(3):460-468.	
		TIBSHIRANI, Robert "Regression shrinkage and selection via the lasso". <i>J. Royal Statist. Soc.</i> , (1996), 58:267-288.	
		TIKHONOV, A. N. "Solution of incorrectly formulated problems and the regularization method". <i>Soviet Math. Doklady</i> , (1963), 4:1035-1038.	
		VESTAL, M., et al. "Resolution and Mass Accuracy in Matrix-Assisted Laser Desorption Ionization-Time-of-Flight", <i>J. Am. Soc. Mass Spectrom.</i> , (1998), 9, 892-911	
		WEHOFSKY, M., et al. "Isotopic deconvolution of matrix-assisted laser desorption/ionization mass spectra for substance class specific analysis of complex samples", (2001), 7:39-46.	
		CHEN, S.S. et al. "Atomic decomposition by basis pursuit". <i>SIAM Journal on Scientific Computing</i> , (1988), 20(1):33-61.	
		WEHOFSKY, M., et al. "Automated deconvolution and deisotoping of electrospray mass spectra". <i>J. Mass Spectrom.</i> , (2002), 37(2):223-229.	
		SERVICE, R.F., "Recruiting genes, proteins for a revolution in diagnostics". <i>Science</i> , (4/11/03), 300:236-239	
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